## Solution 17.1

**Introduction:**

In order for the directors to be able to recognise the rehabilitation costs, it is necessary to consider whether these costs represent a provision or a contingent liability.

**Definitions**

- A provision is a liability of uncertain timing or amount

- A liability is
  - A present obligation (legal or constructive)
  - as a result of a past event
  - the settlement of which is expected to result in an outflow of future economic benefits

**Recognition criteria**

- It is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and
- A reliable estimate can be made of the amount of the obligation.

**Discussion:**

*Present obligation of the entity*
It is more likely than not that a present obligation exists at reporting date. In determining whether or not a present obligation exists, IAS 37 provides further guidance in stating that a present obligation may be either a legal or a constructive obligation.

*A constructive obligation* is an obligation that derives from an entity's actions where:
- by an established pattern of past practice, published policies or a sufficiently specific current statement, the entity has indicated to other parties that it will accept certain responsibilities, and
- as a result, the entity has created a valid expectation on the part of those other parties that it will discharge those responsibilities.

The company is not legally obliged to rehabilitate the soil but a constructive obligation does exist: Toxins Waste Disposal Limited's directors made a statement in the press – before year-end – accepting responsibility for the contamination and committing the company to the rehabilitation of the area by 15 February 20X9. This statement would create a valid expectation on the part of the residents, environmentalists and public that the company will rehabilitate the area.

*Past event*
The past event must exist independent of the entity's future actions. The press statement is a past event as it was made before 31 December 20X8 and has resulted in the entity having no realistic alternative but to replace the soil.

*Outflow of future economic benefits*
The rehabilitation in early 20X9 will involve costs, which will result in an outflow of resources when these costs are paid.

## Solution 17.1 continued . .

Thus the definition of a liability has been met. The amount of this liability is uncertain and thus the definition of a provision is also met

The next step is to ascertain whether or not the recognition criteria are met.

*Probable outflow of future economic benefits*
Since there has been a public statement that the company will rehabilitate the area, it is unlikely that the company would go back on their word. The resultant outflow of economic benefits is therefore probable.

*Reliable estimate possible*
Since this is the first time that this chemical has ever been spilt, the directors requested a team of experts and are still awaiting a detailed evaluation of the extent of the damage and related costs. They have admitted that they are as yet 'unable to estimate' what it will cost.
It is submitted that the complete lack of suitable information means that there is such a high degree of 'uncertainty' that a 'reliable' estimate would not be possible.

Therefore the costs meet the definition of a liability and a provision but not the recognition criteria, with the result that a provision may not be recognised.

**Conclusion**

The rehabilitation costs are thus a contingent liability because they represent:
- a present obligation from past events
- that may not be recognised because the recognition criteria are not completely met: the amount of the obligation cannot be measured with sufficient reliability.

This contingent liability must be disclosed in the notes (and possibly the directors' report due to the possible materiality of the costs involved) showing the following:
- a brief description of the nature of the contingent liability;
- an estimate of its financial effect;
- an indication of the uncertainties relating to the amount or timing of any outflow; and
- the possibility of any reimbursement.

## Solution 17.2

In order to account for the guarantee of the director's loan in the statement of financial position of Beta Limited, it would be necessary for the guarantee to meet the definition of a liability. A liability is defined in The Framework as follows:

- A present obligation of the entity
- That has arisen as a result of a past event,
- The settlement of which is expected to result in an outflow of future economic benefits.

A past event that leads to a present obligation is called an obligating event. The obligating event is the giving of the guarantee and thus there is a present legal obligation.

A liability should be recognised when it is probable that there will be an outflow of resources embodying economic benefits and that a reliable estimate of this outflow can be made. There is no probable outflow of resources until the director defaults and thus the guarantee should not be recognised as a liability, but as a contingent liability.

IAS 37 defines a contingent liability as.

- a possible obligation from past events
- whose existence will be confirmed only by the
- occurrence or non-occurrence of one or more
- uncertain future events
- not wholly within the control of the entity (i.e. the possible default by the director).

Beta Limited should therefore disclose a contingent liability in the notes to the financial statements as required by IAS 37. The relevant disclosure would be as follows:

**BETA LIMITED**
**NOTES TO THE FINANCIAL STATEMENTS**
**FOR THE YEAR ENDED …**

**11. Contingent liability**

The company has guaranteed Mr X's loan of C250 000 and will be liable for repayment of the loan should Mr X default on one or more of his loan repayments.

## Solution 17.3

A liability exists when the definition of a liability is met, that is when:
- an entity has a present obligation (legal or constructive);
- as a result of a past event;
- the settlement of which is expected to result in an outflow of future economic benefits.

A provision is a liability of uncertain timing or amount. Provisions are disclosed separately from the other liabilities that are not uncertain in timing or amount.

Liabilities should be recognised when the above definition is met and when the following recognition criteria is met:
- It is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and
- A reliable estimate can be made of the amount of the obligation.

The accountant should not provide for the future maintenance costs unless there is a past obligating event, being either a:
- legal obligation (e.g. a contract or law that requires maintenance to be carried out); or
- constructive obligation (would not be applicable to this situation).

Only obligations arising from past events that exist independent of the entity's future actions may be raised as provisions. Since the future maintenance is prescribed only by the policy imposed on the company by the directors, no provision should be made since this does not represent a legal or constructive obligation (the directors are still able to change their intention or policy).

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## Solution 17.4

An onerous contract is a contract in which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it.

At 31 December 20X8, it is the costs of the contract are as follows:

| | C |
|---|---|
| Costs already incurred | 12 000 000 |
| Costs to complete | 8 000 000 |
| Total costs | 20 000 000 |

Total revenue to be received under the contract: C15 000 000
Received already: 7 months = C10 500 000
Still to be received: 3 months = C4 500 000

This contract meets the definition of an onerous contract as the costs of the contract exceed the revenue to be derived from it.

A provision must be raised immediately for the lower of the costs of completing the contract or of cancelling it.
Costs to complete: C8 000 000
Costs to cancel: C2 000 000

Thus a provision should be raised for C2 000 000.

## Solution 17.5

### Rich Kid Ltd

Rich Kid Ltd offers a guarantee to customers, thus a provision must be raised for the expected costs of fulfilling guarantees. Goods were sold with a six-month guarantee and sales for the 20X8 year amount to C500 000. The guarantee relating to goods sold from 1 January to 30 June 20X8 has expired, and it is only the goods sold from 1 July to 31 December 20X8 that are still under guarantee. Thus a provision must be raised for:
C500 000 X 50% X 15% (most likely returns) = C37 500.

Super-Duper Ltd offers a guarantee on goods sold to Rich Kid Ltd, thus returns to Rich Kid Ltd may be passed on to Super-Duper Ltd for fulfillment. Thus the portion of C37 500 expected returns to Rich Kid Ltd that relates to goods originally bought from Super-duper Ltd may be raised as an asset (if reimbursement from Super-Duper Ltd is virtually certain) or as a contingent asset (if reimbursement from Super-duper Ltd is probable).

### Super-Duper Ltd

Super-duper Ltd also offers a guarantee to customers, thus a provision must be raised for the expected costs of fulfilling guarantees. Goods were sold with a six-month guarantee and sales for the 20X8 year amount to C7 000 000. Thus a provision must be raised for:
C7 000 000 X 50% (6-month guarantee) X 10% (most likely returns) = C350 000.

### Money-cruncher Ltd

No guarantee is offered, yet returns are still refunded. A provision must be raised for the expected costs of refunds, to the extent that Money-Cruncher is prepared to accept returned goods. The period for which goods will be refunded is not known. Sales for the 20X8 year were C5 000 000 and it is estimated that 5% of goods will be returned.

## Solution 17.6

### a) Repairs at sea

It is necessary to determine whether or not the cost of the repairs meet the requirements for recognising a liability in terms of The Framework.

The Framework defines a liability as:
- a present obligation of the entity
- arising from a past event
- the settlement of which is expected to result in an outflow of future economic benefits.

A liability is then recognised if
- it is probable that an outflow of resources will result from the settlement of the liability, and
- the amount of the settlement can be measured reliably.

The cost of repairing the tanker at sea results in a 'pure' liability. Applying the definition and recognition criteria above:
- the work was carried out by the special crew on 29 September 20X9, which is classified as a past event since this date occurs before year end;
- since there is a past event, being the repair carried out on 29 September 20X9, there is a present legal obligation to pay for these repairs;
- the future payment of C365 000 is an outflow of economic resources;
- the amount will probably be paid since there is no evidence to the contrary; and
- the repair has already been invoiced at C365 000 and is therefore a reliably measure.

A liability of C365 000 should therefore be recognised in the statement of financial position at 30 September 20X9 and an expense of C365 000 included in the statement of comprehensive income for the year.

### b) Repairs at the dry-dock

BatterSea Shipping need to assess whether the cost of repairs to the tanker in the dry dock meet the definition of a liability at 30 September 20X9.

The Framework defines a liability as:
- a present obligation of the entity
- arising from a past event
- the settlement of which is expected to result in an outflow of economic benefits.

As at 30 September 20X9 no work has been performed and therefore there is no past event and consequently no present obligation has yet arisen. The amount of C2 750 000 would, however, be disclosed in the commitments note in the annual financial statements, as 'capital expenditure not yet contracted for'. Since the definition has not been met, the estimated cost of C2 750 000 to repair the tanker once docked may not be recognized as a liability.

When the repairs are performed after reporting date it will not constitute an adjusting post reporting period event. This is because the repairs do not provide additional information about a condition that existed at reporting date. The contract was signed and the repairs were performed after reporting date.

## Solution 17.6 continued …

It would also be necessary to perform an impairment test on the tanker at year end.

**c) Clean up of the environment**

**Introduction:**

It is necessary to determine whether or not the costs of cleaning up the environment meet the definition of a provision.

IAS 37 defines a provision as
- a liability
- of uncertain timing or amount.

The Framework defines a liability as:
- a present obligation of the entity
- arising from a past event
- the settlement of which is expected to result in an outflow of future benefits.

***Discussion of definitions:***

*Present obligation of the entity*
A present obligation is the result of an obligating event. An obligating event is defined by IAS 37 as an event
- that creates a legal or constructive obligation
- that results in an entity having no realistic alternative to settling that obligation.

Per IAS 37 a constructive obligation is an obligation that derives from an entity's actions where:
- by an established pattern of past practice, published policies or a sufficiently specific current statement, the entity has indicated to other parties that it will accept certain responsibilities, and
- as a result , the entity has created a valid expectation on the part of those other parties that it will discharge those responsibilities.

The entity is not legally obliged to rehabilitate the area but the managing director's announcement in the press on 30 September 20X9 of the company's intention to clean up the entire area of the spill, indicates the company's acceptance of its responsibility to rehabilitate the area. This action has created a valid expectation on the part of the public and environmentalists that the company will actually bear these costs. After making a public announcement, it is unlikely that the company will *not* clean up the environment; as such an action would have an adverse effect on their business reputation. Therefore the announcement before year-end is the past obligating event that has created a constructive obligation on behalf of the company to clean up the area.

*Past event:*
There is a past event since the press statement that obligated the entity was made before year-end.

*Expected outflow of future economic benefits:*
There will be costs incurred from the specialists hired to advise on the extent/ most effective method of cleaning up to the actual costs of cleaning up.

## Solution 17.6 continued …

Since the actual amount is uncertain, the liability would be recognised as a provision.

***Discussion of recognition criteria:***
IAS 37 requires a provision to be recognised when:
- it is probable that an outflow of resources will be required to settle the obligation,
- and a reliable estimate can be made of the obligation.

It is probable that there will be an outflow of resources as a constructive obligation exists and a team of experts was engaged to assess the extent of the damage and the most effective method of cleaning up the spill.

A reliable estimate of the cost of the clean up can be made based on the past experience of the team of environmentalists. Since this estimate will be available before the financial statements are authorised for issue, a provision should be recognised in the financial statements of the company at 30 September 20X9. In effect, the results of the environmental assessment on 31 October 20X9 will be an adjusting post reporting period event.

IAS 37 requires disclosure of the following in respect of a provision
- the amount of the provision made during the period;
- a brief description of the nature of the obligation;
- the expected timing of any resulting outflows of economic benefits; and
- an indication of the uncertainties about the amount or timing of those outflows.
- Where necessary to provide adequate information, an entity should disclose the major assumptions made concerning future events.

## Solution 17.7

### Introduction

A liability should be recognised when
- An entity has a present obligation (legal or constructive) as a result of a past event, the settlement of which is expected to result in an outflow of future economic benefits;
- It is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and
- A reliable estimate can be made of the obligation.

There are two trains of thought with regard to recognising audit fees. One is that the audit fees should be recognised as a liability in the financial year in which the audit services are rendered (the past event), as that is when the obligation (legal) to pay the audit firm arises, and the other is that audit fees may be recognised in the year to which the audit pertains, even if that audit is only performed after reporting date, as there is a legal obligation to have the financial statements audited as a result of having traded during the year (the past event).

### Discussion

*The C900 000:*
- the delivery of the audit services before 30 September 20X1 is the past event;
- the past event results in a obligation being present at year-end, since it had not yet been paid as at year-end;
- this obligation is reliably measured at the C900 000 payable in respect of these services, since this figure has either been provided by way of an invoice from the auditors or would have been checked by the auditors; and
- since there is no evidence to the contrary, the payment of these fees appears probable.

A provision is a liability, the amount or timing of which is uncertain. Since there appears to be no uncertainty regarding the amount or timing (it is assumed that the C900 000 was determined per an invoice received from the auditors or will have been checked by the auditor for reasonableness), it would appear to be a 'pure' liability and not a provision.

*The C300 000:*

Recognition of the C300 000 depends on the train of thought followed regarding what represents the past event:
- the physical audit (which leads to the legal obligation to pay the audit firm); or
- the trading of the business (which leads to the legal obligation to have a statutory audit).

If having the physical audit services performed is regarded as the past event:
- Although the C300 000 may be a reliable estimate (based probably on the audit budget and/ or past experience or an invoice received from the auditors after year-end),
- the related services have not been rendered as at 30 September 20X1, and therefore there is no past event at year end, and
- thus there is no obligation present at year end.

If having traded during the financial year is considered the past event:
- There is a present legal obligation to have the financial statements audited,
- Although the audit has not yet occurred, there is a reliable estimate of the amount of the outflow (C300 000),

## Solution 17.7 continued …

- There is some uncertainty as to the amount and timing of the outflow because the work still has to be performed, and the amount will only be paid based on the work done once it has been done, thus the obligation at reporting date may be recognised as a provision.

**Conclusion**

A liability for audit fees of C900 000 should therefore be recognised as at 30 September 20X1. The C300 000 may be recognised as a provision at 30 September 20X1 (if trading is considered to be the past event) or it may not be recognised at all (if the physical audit is considered to be the past event).
In Pakistan, it is a normal industry practice to book the liability by the whole amount, i.e. to book the liability of the audit fees in the year to which the audit pertains as there is a legal audit obligation for the companies.

## Solution 17.8

**a) The Framework definition and recognition criteria**

*Liability definition (The Framework):*
- A present obligation of the entity
- As a result of a past event
- The settlement of which is expected to lead to an outflow of future economic benefits.

*Recognition criteria (The Framework):*
- Probable outflow of future economic benefits
- Cost/ value can be reliably measured.

**b) IAS 37 recognition criteria for restructuring provisions**

The recognition criteria stipulated in IAS 37 to be met before recognising a provision for restructuring include the following:
- There must be a detailed formal plan that identifies at least the following:
  - The business or part of the business affected
  - The principal locations affected
  - The location, function and approximate number of employees who will be compensated for terminating their services
  - The expenditure that will be undertaken
  - When the plan will be implemented; AND
- A valid expectation must have been raised in those parties that would be affected by the restructuring (thus creating a 'constructive obligation') through:
  - starting to implement the plan; or
  - announcing the main features to those affected by it.

Restructuring is defined in IAS 37 as:
- A programme planned and controlled by management that materially changes either:
  - the scope of the business; or
  - the manner in which the business is conducted.

**c) Discussion**

*Restructuring:*
The plan meets the definition of a restructuring since:
- It is a programme planned and controlled by management since management was responsible for the development of a formal plan to which all directors have agreed;
- The plan will result in the cessation of tyre manufacturing (a material change in the scope of the business) and will involve the importation of goods in the future (thus materially changing the manner in which the business is conducted).

## Solution 17.8 continued . . .

*Liability definition:*
For there to be a liability, it must meet the definition of a liability:
- Present obligation
- As a result of a past event
- From which future economic benefits are expected to flow in settlement thereof.

The entity has no obligation as at 30 June 20X3:
- There is no legal obligation to close the tyre manufacturing business; and
- There is no constructive obligation as at 30 June 20X3.

For the restructuring to cause a constructive obligation:
- There must be a detailed formal plan stipulating at least the following:
  - The business or part of the business affected
  - The principal locations affected
  - The location, function and approximate number of employees who will be compensated for terminating their service
  - The expenditure that will be undertaken
  - When the plan will be implemented.
- The entity must have created valid expectations in those affected by the future restructuring before reporting date.

There is a detailed formal plan that stipulates:
- The business or part of the business affected: tyre manufacturing
- The principal locations affected: Eshowe
- The location, function and approximate number of employees who will be compensated for terminating their services: Eshowe; 50 factory and admin staff
- The expenditure that will be undertaken: retrenchment packages
- When the plan will be implemented: December 20X4.

Valid expectations had not been created at reporting date since the plan had:
- not been announced to those affected: it is only to be announced on 30 September 20X4; and
- not begun.

There is therefore no valid expectation and therefore no obligation as at 30 June 20X3.

- There is an *event* in that a decision was made to discontinue the tyre branch and the development of a formal plan, both of which are *past events* since they occurred before year-end.
- These events on their own do not lead to an *obligation*: the extra event that would have been required in order to lead to an obligation is either the announcement of the plan or starting the implementation thereof.
- The discontinuation would result in retrenchment packages thus an *outflow*, of future economic benefits, is expected.

*Recognition criteria:*
- The outflow of future economic benefits is probable since the plan has been agreed upon.
- A thorough analysis of the expected cost of the discontinuance has been performed by the company's financial team making the estimate a reliable one (C1 500 000).

Since no legal or constructive obligation exists, no provision for restructuring costs should be recognise in the financial statements as at 30 June 20X3.

## Solution 17.8 continued . . .

**d) Measurement**

- The provision would be C1 500 000.
- The cost of retraining the staff that would remain in Yolande Ltd's employ is considered to be a cost related to the ongoing activities of Yolande Ltd and must therefore be excluded from the provision for costs related to the discontinuance.
- All gains related to the restructuring are to be excluded from the provision.

## Solution 17.9

**Definitions:**

The Framework defines a liability as:

- a present obligation of the entity
- arising from a past event
- the settlement of which is expected to result in an outflow of future economic benefits.

IAS 37 defines a provision as:

- a liability
- of uncertain timing or amount.

A provision is recognised when:

- An entity has a present obligation (legal or constructive) as a result of a past event, the settlement of which is expected to result in an outflow of future economic benefits;
- It is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and
- A reliable estimate can be made of the amount of the obligation.

An asset is:

- a resource controlled by the entity
- as a result of a past event
- from which future economic benefits are expected to flow into the entity.

***Discussion:***

*Previous major inspection as an asset:*

The previous major inspection (carried out by the seller) represents an asset to Flybynight Limited:

- it is a resource in that the last required inspection has already been performed with the result that Flybynight Limited is legally able to fly the airplane;
- it is controlled by the entity through the receipt of the legal documents proving that the aeroplane passed this inspection;
- the past event was the purchase of the aeroplane that had already undergone the major inspection; and
- the ability to then use the aeroplane obviously leads to the expected inflow of future economic benefits.

*The future major inspection as an asset:*

The future major inspection does not, however, meet the definition of an asset:

- the company does not control a resource since the major inspection has not yet been performed or paid for;
- there is no past event since the major inspection is to be performed in the future;
- if there is no resource there can be no expectation of an inflow of future economic benefits.

## Solution 17.9 continued …

*The future major inspection as a liability:*

Similarly, a provision for the future major inspection should not be raised because there is no liability:

- since the major inspection has not yet occurred, there is no past event;
- therefore there is no present obligation at year end (the major inspection could, in fact, be completely avoided by selling or otherwise disposing off/ abandoning the airplane before the inspection becomes necessary); and
- since there is neither a past event or present obligation, the outflow of future economic benefits is not yet expected.

*Assets – cost of acquisition and significant parts:*

The acquisition of an asset should be measured at the necessary cost incurred in bringing the asset to a location and condition suitable for its intended use. Since the future major inspection is not a prerequisite for the current usage of the aeroplane (there were another 10 000 – 4 000 = 6 000 flying hours available on the date of acquisition) and has not yet been incurred, it may not be recognised as an asset or liability.

Note that the previous major inspection performed should be recognised as a separate component to the aeroplane asset (i.e. a significant part of) since it is significant in cost and has a different useful life to the rest of the aeroplane parts.

*Assets – subsequent measurement:*

The major inspection, which is recognised as a separate significant part, is depreciated as the 10 000 allowed flying hours are used up. Thus a 'major inspection' asset of C252 000 (C420 000 [cost of previous inspection] x 6000 hrs / 10 000 hrs) should be recognised on acquisition date. This will result in the cost of the 'physical aeroplane' asset being C4 248 000 (C4 500 000 – C252 000). The 'major inspection' asset will have been depreciated by C11 466 since purchase date (C252 000 x 273 hours / 6 000 hours). Once the 6 000 flying hours that were available on purchase date are used up, and a new inspection is actually performed, the previous major inspection cost asset will be derecognised and the new inspection costs will be capitalised (when the next inspection is performed) and depreciated as the renewed flying hours are used up.

***Conclusion:***

The journal must be reversed as follows:

| | Debit | Credit |
|---|---|---|
| Provision for major inspection (Liability) | 500 000 | |
| Major inspection (Asset) | | 500 000 |

*

## Solution 17.10

**a)**

The issue is to determine whether to recognise a provision in respect of the future decommissioning costs.

IAS 37 defines a provision as a liability of uncertain timing or amount. Thus it is necessary to firstly determine whether or not there is a liability. The Framework defines a liability as:

- A present obligation of the entity
- As a result of a past event
- The settlement of which will result in an outflow of future economic benefits.

In determining whether or not a present obligation exists, IAS 37 provides further guidance in stating that a present obligation may be a legal or a constructive obligation. A legal obligation is an obligation that derives from:

- a contract (through its explicit or implicit terms),
- legislation, or
- other operation of law.

The licence granted allows the operation of the plant and machinery but includes a clause that requires the entity to dismantle the plant and restore the area in the future. There is therefore a legal obligation for the costs associated with the future dismantling and restoration.

A past event that leads to a present obligation is called an obligating event. The obligating event is the installation of the plant and machinery in terms of this licence and thus there is a legal obligation present at year-end.

Since there is:

- a past obligating event: the installation of the plant and machinery;
- that leads to a present obligation: the legal obligation results from the installation in terms of the licence; and
- it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation (the payment of the decommissioning costs in the future);
- a reliable estimate can be made of the obligation (the decommissioning costs are estimated at C120 000).

a provision for future decommissioning costs can be raised. The provision must be capitalised to the cost of the plant and machinery. This is because assets are raised at cost and in terms of IAS 16, one of the components of cost is future decommissioning costs.

*Note to student:*
Decommissioning and dismantling are two terms that are frequently used in the accounting world to refer essentially to the same thing. Strictly speaking, 'decommissioning' refers to taking an asset (e.g. machine or plant) out of operation whereas 'dismantling' refers to the 'taking apart' of an asset.

## Solution 17.10 continued …

**b)**

| | | Debit | Credit |
|---|---|---|---|
| 01/10/X2 | Plant & machinery: cost (Asset) | 1 000 000 | |
| | Bank | | 1 000 000 |
| | *(Purchase price)* | | |
| 10-12/ X2 | Plant & machinery: cost (Asset) | 175 480 | |
| | Bank | | 175 480 |
| | *(Installation costs)* | | |
| 01/01/X3 | Plant & machinery: decommissioning: cost (Asset) | 74 520 | |
| | Provision for decommissioning liability | | 74 520 |
| | *(PV of future decommissioning costs)* | | |
| 31/12/X3 | Finance costs | 7 440 | |
| | Provision for decommissioning liability | | 7 440 |
| | *(Unwinding of PV of decommissioning liability)* | | |
| | *(81 960 – 74 520)* | | |
| | Depreciation | 250 000 | |
| | Plant & machinery: accumulated depreciation | | 235 096 |
| | Plant & machinery: decommissioning: accumulated depreciation | | 14 904 |
| | *(1 175 480 / 5) (74 520 / 5)* | | |

*Please note: the accumulated depreciation of each of these two parts – the physical plant & machinery versus the expected costs of decommissioning can be combined into a single accumulated depreciation account if preferred (since the rate of depreciation is the same in both cases).*

**c)**

**LEO LIMITED**
**EXTRACT FROM STATEMENT OF COMPREHENSIVE INCOME**
**FOR THE YEAR ENDED 31 DECEMBER 20X4**

| | 20X4 C | 20X3 C |
|---|---|---|
| Finance costs | 8 160 | 7 440 |

**LEO LIMITED**
**EXTRACT FROM STATEMENT OF FINANCIAL POSITION**
**AS AT 31 DECEMBER 20X4**

| | | Note | 20X4 C | 20X3 C |
|---|---|---|---|---|
| **Non-current assets** | | | | |
| Plant & machinery | | | 750 000 | 1 000 000 |
| Cost | (1 000 000 + 175 480 + 74 520) | | 1 250 000 | 1 250 000 |
| Accumulated depreciation | (1 250 000 / 5 X 2)<br>(1 250 000 / 5 x 1) | | (500 000) | (250 000) |
| **Non-current liabilities** | | | | |
| Provision for decommissioning liability | | 2 | 90 120 | 81 960 |

## Solution 17.10 continued …

**LEO LIMITED**
**EXTRACT FROM NOTES TO THE FINANCIAL STATEMENTS**
**FOR THE YEAR ENDED 31 DECEMBER 20X4**

**1. Accounting policies**

**Provisions**

Provisions are recognised when the company has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount can be made.

**2 Provision for decommissioning liability**

| | 20X4<br>C |
|---|---|
| Carrying amount at beginning of period | 81 960 |
| Unwinding of discounted present value | 8 160 |
| Carrying amount at end of period | 90 120 |

The provision for decommissioning liability arises from the dismantling and restoration costs relating to the plant and machinery. These costs are expected to be incurred at 31 December 20X7.

The dismantling and restoration costs are estimated to be C120 000 and are not expected to change.

## Workings

| Date | Years to decommissioning date | 10% discount factor | PV | Finance costs |
|---|---|---|---|---|
| 01/01/X3 | 5 | 0.621 | 74 520 | |
| 31/12/X3 | 4 | 0.683 | 81 960 | 7 440 |
| 31/12/X4 | 3 | 0.751 | 90 120 | 8 160 |
| 31/12/X5 | 2 | 0.826 | 99 120 | 9 000 |
| 31/12/X6 | 1 | 0.909 | 109 080 | 9 960 |
| 31/12/X7 | 0 | 1.000 | 120 000 | 10 920 |

## Solution 17.11

### a) No change in estimate

### i) Journals

| | Debit | Credit |
|---|---|---|
| **1 January 20X1** | | |
| Nuclear plant: cost (Asset) | 2 000 000 | |
| Bank | | 2 000 000 |
| *Purchase of nuclear plant for cash* | | |
| Nuclear plant (decommissioning): cost (Asset) | 1 156 630 | |
| Decommissioning liability | | 1 156 630 |
| *Initial recognition of the decommissioning obligation (present value of future cost of C3 000 000 discounted at 10%)* | | |
| **31 December 20X1** | | |
| Finance charges (Expense) | 115 663 | |
| Decommissioning liability | | 115 663 |
| *Increase in liability as a result of unwinding of the discount* | | |
| Depreciation (Expense) | 315 663 | |
| Nuclear plant: accumulated depreciation | | 315 663 |
| *Depreciation of nuclear plant (2 000 000 + 1 156 630) / 10 years* | | |
| **31 December 20X2** | | |
| Finance charges (Expense) | 127 229 | |
| Decommissioning liability | | 127 229 |
| *Increase in liability as a result of unwinding of the discount* | | |
| Depreciation (Expense) | 315 663 | |
| Nuclear plant: accumulated depreciation | | 315 663 |
| *Depreciation of nuclear plant (2 000 000 + 1 156 630) / 10 years* | | |
| **31 December 20X3** | | |
| Finance charges (Expense) | 139 952 | |
| Decommissioning liability | | 139 952 |
| *Increase in liability as a result of unwinding of the discount* | | |
| Depreciation (Expense) | 315 663 | |
| Nuclear plant: accumulated depreciation | | 315 663 |
| *Depreciation of nuclear plant (2 000 000 + 1 156 630) / 10 years* | | |
| **31 December 20X4** | | |
| Finance charges (Expense) | 153 947 | |
| Decommissioning liability | | 153 947 |
| *Increase in liability as a result of unwinding of the discount* | | |
| Depreciation (Expense) | 315 663 | |
| Nuclear plant: accumulated depreciation | | 315 663 |
| *Depreciation of nuclear plant (2 000 000 + 1 156 630) / 10 years* | | |
| **31 December 20X5** | | |
| Finance charges (E) | 169 342 | |
| Decommissioning liability | | 169 342 |
| *Increase in liability as a result of unwinding of the discount* | | |
| Depreciation (Expense) | 315 663 | |
| Nuclear plant: accumulated depreciation | | 315 663 |
| *Depreciation of nuclear plant (2 000 000 + 1 156 630) / 10 years* | | |

## Solution 17.11 continued …

### a) continued …

| | Debit | Credit |
|---|---|---|
| **31 December 20X6** | | |
| Finance charges (Expense) | 186 276 | |
| Decommissioning liability | | 186 276 |
| *Increase in liability as a result of unwinding of the discount* | | |
| Depreciation (Expense) | 315 663 | |
| Nuclear plant: accumulated depreciation | | 315 663 |
| *Depreciation of nuclear plant (2 000 000 + 1 156 630) / 10 years* | | |
| **31 December 20X7** | | |
| Finance charges (Expense) | 204 904 | |
| Decommissioning liability | | 204 904 |
| *Increase in liability as a result of unwinding of the discount* | | |
| Depreciation (Expense) | 315 663 | |
| Nuclear plant: accumulated depreciation | | 315 663 |
| *Depreciation of nuclear plant (2 000 000 + 1 156 630) / 10 years* | | |
| **31 December 20X8** | | |
| Finance charges (Expense) | 225 394 | |
| Decommissioning liability | | 225 394 |
| *Increase in liability as a result of unwinding of the discount* | | |
| Depreciation (Expense) | 315 663 | |
| Nuclear plant: accumulated depreciation | | 315 663 |
| *Depreciation of nuclear plant (2 000 000 + 1 156 630) / 10 years* | | |
| **31 December 20X9** | | |
| Finance charges (Expense) | 247 934 | |
| Decommissioning liability | | 247 934 |
| *Increase in liability as a result of unwinding of the discount* | | |
| Depreciation (Expense) | 315 663 | |
| Nuclear plant: accumulated depreciation | | 315 663 |
| *Depreciation of nuclear plant (2 000 000 + 1 156 630) / 10 years* | | |
| **31 December 20X10** | | |
| Finance charges (Expense) | 272 727 | |
| Decommissioning liability | | 272 727 |
| *Increase in liability as a result of unwinding of the discount* | | |
| Depreciation (Expense) | 315 663 | |
| Nuclear plant: accumulated depreciation | | 315 663 |
| *Depreciation of nuclear plant (2 000 000 + 1 156 630) / 10 years* | | |
| Decommissioning liability | 3 000 000 | |
| Bank | | 3 000 000 |
| *Payment in respect of decommissioning* | | |

Notice that C5 000 000 is expensed through total depreciation of C3 156 630 over the 10 years and total finance charges of C1 843 370 (being the C2 000 000 (the cost of asset excluding decommissioning costs) plus C3 000 000 (the decommissioning costs)).

## Solution 17.11 continued …

### a) continued …

### ii) Disclosure

**MENACE LIMITED**
**NOTES TO THE FINANCIAL STATEMENTS**
**FOR THE YEAR ENDED 31 DECEMBER 20X10**

**6. Provision for future decommissioning of nuclear plant**

| | 20X10 C'000 | 20X9 C'000 | 20X8 C'000 | 20X7 C'000 | 20X6 C'000 | 20X5 C'000 | 20X4 C'000 | 20X3 C'000 | 20X1 C'000 | 20X0 C'000 |
|---|---|---|---|---|---|---|---|---|---|---|
| Opening balance | 2 727 | 2 479 | 2 254 | 2 049 | 1 863 | 1 694 | 1 540 | 1 400 | 1 272 | 0 |
| Present value of future costs | - | - | - | - | - | - | - | - | - | 1 157 |
| Finance charges | 273 | 248 | 225 | 205 | 186 | 169 | 154 | 140 | 127 | 116 |
| Payment | (3 000) | - | - | - | - | - | - | - | - | - |
| Closing balance | 0 | 2 727 | 2 479 | 2 254 | 2 049 | 1 863 | 1 694 | 1 540 | 1 400 | 1 272 |

*The following information would be provided in all years to 20X9:*
Decommissioning of the plant is expected to occur on 31 December 20X10 and is expected to result in cash outflows of C3 000 000. The amount of the outflows is uncertain due to changing prices. The timing of the outflow is uncertain due to the changing asset usage, which may result in a longer or shorter useful life. Major assumptions include that the interest rates will remain at 10% and that the asset has a useful life of 10 years.

## Workings:

**Present value table:**

| Date | Discount factor (rounded):10% | Calculation of discount factor | Liability balance 3 000 000 x Discount factor | Finance charges |
|---|---|---|---|---|
| 1/1/X1 | 0.38554 | *0.424/(1+10%)* | 1 156 630 | |
| 31/12/X1 | 0.42410 | *0.467/(1+10%)* | 1 272 293 | 115 663 |
| 31/12/X2 | 0.46651 | *0.513/(1+10%)* | 1 399 522 | 127 229 |
| 31/12/X3 | 0.51316 | *0.565/(1+10%)* | 1 539 474 | 139 952 |
| 31/12/X4 | 0.56447 | *0.621/(1+10%)* | 1 693 422 | 153 947 |
| 31/12/X5 | 0.62092 | *0.683/(1+10%)* | 1 862 764 | 169 342 |
| 31/12/X6 | 0.68301 | *0.751/(1+10%)* | 2 049 040 | 186 276 |
| 31/12/X7 | 0.75131 | *0.826/(1+10%)* | 2 253 944 | 204 904 |
| 31/12/X8 | 0.82645 | *0.909/(1+10%)* | 2 479 339 | 225 394 |
| 31/12/X9 | 0.90909 | *1/(1+10%)* | 2 727 273 | 247 934 |
| 31/12/X10 | 1.00000 | *Actual = 1* | 3 000 000 | 272 727 |
| | | | | 1 843 370 |

## Solution 17.11 continued …

### b) Change in estimate during the 10-year period

| i) Journals: | Debit | Credit |
|---|---|---|
| **1 January 20X1** | | |
| Nuclear plant: cost [Asset (A)] | 2 000 000 | |
| Bank | | 2 000 000 |
| *Purchase of nuclear plant for cash* | | |
| Nuclear plant (decommissioning): cost (A) | 1 156 630 | |
| Decommissioning liability | | 1 156 630 |
| *Initial recognition of the decommissioning obligation (present value of future cost of C3 000 000 discounted at 10%)* | | |
| **31 December 20X1** | | |
| Finance charges [Expense (E)] | 115 663 | |
| Decommissioning liability | | 115 663 |
| *Increase in liability as a result of unwinding of the discount* | | |
| Depreciation (E) | 315 663 | |
| Nuclear plant: accumulated depreciation | | 315 663 |
| *Depreciation of nuclear plant (2 000 000 + 1 156 630) / 10 years* | | |
| **31 December 20X2** | | |
| Finance charges (E) | 127 229 | |
| Decommissioning liability | | 127 229 |
| *Increase in liability as a result of unwinding of the discount* | | |
| Depreciation (E) | 315 663 | |
| Nuclear plant: accumulated depreciation | | 315 663 |
| *Depreciation of nuclear plant (2 000 000 + 1 156 630) / 10 years* | | |
| **31 December 20X3** | | |
| Finance charges (E) | 139 952 | |
| Decommissioning liability | | 139 952 |
| *Increase in liability as a result of unwinding of the discount* | | |
| Depreciation (E) | 315 663 | |
| Nuclear plant: accumulated depreciation | | 315 663 |
| *Depreciation of nuclear plant (2 000 000 + 1 156 630) / 10 years* | | |
| **31 December 20X4** | | |
| Nuclear plant (decommissioning): cost (A) | 410 527 | |
| Decommissioning liability | | 410 527 |
| *Change in estimated future costs: increase in decommissioning obligation: W3* | | |
| Finance charges (E) | 195 000 | |
| Decommissioning liability | | 195 000 |
| *Increase in liability as a result of unwinding of the discount* | | |
| Depreciation (E) | 374 310 | |
| Nuclear plant: accumulated depreciation | | 374 310 |
| *Depreciation of nuclear plant*: W5 | | |

## Solution 17.11 continued …

### b) continued …

**Journals continued …**

| | Debit | Credit |
|---|---|---|
| **31 December 20X5** | | |
| Finance charges (E) | 214 500 | |
| Decommissioning liability | | 214 500 |
| *Increase in liability as a result of unwinding of the discount* | | |
| Depreciation (E) | 374 310 | |
| Nuclear plant: accumulated depreciation | | 374 310 |
| *Depreciation of nuclear plant* (2 000 000 + 1 465 064) / 10 years | | |
| **31 December 20X6** | | |
| Finance charges (E) | 235 950 | |
| Decommissioning liability | | 235 950 |
| *Increase in liability as a result of unwinding of the discount* | | |
| Depreciation (E) | 374 310 | |
| Nuclear plant: accumulated depreciation | | 374 310 |
| *Depreciation of nuclear plant* (2 000 000 + 1 465 064) / 10 years | | |
| **31 December 20X7** | | |
| Finance charges (E) | 259 545 | |
| Decommissioning liability | | 259 545 |
| *Increase in liability as a result of unwinding of the discount* | | |
| Depreciation (E) | 374 310 | |
| Nuclear plant: accumulated depreciation | | 374 310 |
| *Depreciation of nuclear plant* (2 000 000 + 1 465 064) / 10 years | | |
| **31 December 20X8** | | |
| Finance charges (E) | 285 500 | |
| Decommissioning liability | | 285 500 |
| *Increase in liability as a result of unwinding of the discount* | | |
| Depreciation (E) | 374 310 | |
| Nuclear plant: accumulated depreciation | | 374 310 |
| *Depreciation of nuclear plant* (2 000 000 + 1 465 064) / 10 years | | |
| **31 December 20X9** | | |
| Finance charges (E) | 314 050 | |
| Decommissioning liability | | 314 050 |
| *Increase in liability as a result of unwinding of the discount* | | |
| Depreciation (E) | 374 310 | |
| Nuclear plant: accumulated depreciation | | 374 310 |
| *Depreciation of nuclear plant* (2 000 000 + 1 465 064) / 10 years | | |
| **31 December 20X10** | | |
| Finance charges (E) | 345 455 | |
| Decommissioning liability | | 345 455 |
| *Increase in liability as a result of unwinding of the discount* | | |
| Depreciation (E) | 374 310 | |
| Nuclear plant: accumulated depreciation | | 374 310 |
| *Depreciation of nuclear plant* (2 000 000 + 1 465 064) / 10 years | | |
| Decommissioning liability | 3 800 000 | |
| Bank | | 3 800 000 |
| *Payment in respect of decommissioning* | | |

Notice that C5 800 000 is expensed over the 10 years: depreciation of C3 465 061 and finance charges of C2 334 936 (C2 000 000: cost of asset excluding decommissioning cost and C3 800 000 (decommissioning). Please note that there is a difference of C3, which is due to rounding.

## Solution 17.11 continued …

### b) continued …

Please also note that all journal entries up to 31 December 20X3 remain unchanged, since a change in estimate is processed prospectively, which means that it only affects the year of the change and future years.

### ii) Statement of financial position note disclosure

**MENACE LIMITED**
**NOTES TO THE FINANCIAL STATEMENTS**
**FOR THE YEAR ENDED 31 DECEMBER 20X10**

**7. Provision for future decommissioning of nuclear plant**

| | 20X10 C'000 | 20X9 C'000 | 20X8 C'000 | 20X7 C'000 | 20X6 C'000 | 20X5 C'000 | 20X4 C'000 | 20X3 C'000 | 20X1 C'000 | 20X0 C'000 |
|---|---|---|---|---|---|---|---|---|---|---|
| Opening balance | 3 454.5 | 3 140.5 | 2 855.0 | 2 595.5 | 2 359.5 | 2 145 | 1 540 | 1 400 | 1 272 | 0 |
| Present value of future costs | - | - | - | - | - | - | - | - | - | 1 157 |
| Increase in estimated future costs: | | | | | | | | | | |
| - original PV | | | | | | | 410 | | | |
| Finance charges | 345.5 | 314.0 | 285.5 | 259.5 | 236 | 214.5 | 195 | 140 | 127 | 116 |
| Payment | (3 800) | - | - | - | - | - | - | - | - | - |
| Closing balance | 0 | 3 454.5 | 3 140.5 | 2 855.0 | 2 595.5 | 2 359.5 | 2 145 | 1 540 | 1 400 | 1 272 |

*The following information would be provided in all years to 20X9:*
Decommissioning of the plant is expected to occur on 31 December 20X10 and is expected to result in cash outflows of C3 800 000 (previous estimate was C3 000 000). The amount of the outflows is uncertain due to changing prices. The timing of the outflow is uncertain due to the changing asset usage, which may result in a longer or shorter useful life. Major assumptions include that the interest rates will remain at 10% and that the asset has a useful life of 10 years.

### iii) Statement of comprehensive income note disclosure

**8. Profit before tax**

| | | | 20X4 C | 20X3 C | 20X2 C | 20X1 C |
|---|---|---|---|---|---|---|
| Profit before tax is stated after accounting for the following disclosable (income)/ expense items: | | | | | | |
| Finance charges | | | 195 000 | 139 952 | 127 229 | 115 663 |
| - previous estimate | | | 153 947 | | | |
| - change in estimate | *W4* | 9 | 41 053 | | | |
| Depreciation | | | 374 310 | 315 663 | 315 663 | 315 663 |
| - previous estimate | | | 315 663 | | | |
| - change in estimate | *W5* | 9 | 58 647 | | | |

## Solution 17.11 continued …

### b) continued …

**9. Change in estimate**

The expected cash outflow on 31 December 20X10 in respect of the decommissioning of plant was changed. The (increase)/ decrease caused by the change is as follows:

| | | | **20X4 C** |
|---|---|---|---|
| | *[Extra int + extra dep]* | | |
| • Current year profits (before tax) | *[41 053 + 58 647]* | *W4 & W5* | 99700 |
| • Future profits (before tax) | *[348 420 + 351 880]* | *W4 & W5* | 700 300 |
| | | | 800 000 |

## Workings:

**W1 Present value table 1: old estimate**

| Date | **Discount factor (rounded):10%** | ***Calculation of discount factor*** | **Liability Balance** *3 000 000 x Discount factor* | **Finance charges** |
|---|---|---|---|---|
| 1/1/X1 | 0.38554 | *0.424/(1+10%)* | 1 156 630 | |
| 31/12/X1 | 0.42410 | *0.467/(1+10%)* | 1 272 293 | 115 663 |
| 31/12/X2 | 0.46651 | *0.513/(1+10%)* | 1 399 522 | 127 229 |
| 31/12/X3 | 0.51316 | *0.565/(1+10%)* | 1 539 474 | 139 952 |
| 31/12/X4 | 0.56447 | *0.621/(1+10%)* | 1 693 422 | 153 947 |
| 31/12/X5 | 0.62092 | *0.683/(1+10%)* | 1 862 764 | 169 342 |
| 31/12/X6 | 0.68301 | *0.751/(1+10%)* | 2 049 040 | 186 276 |
| 31/12/X7 | 0.75131 | *0.826/(1+10%)* | 2 253 944 | 204 904 |
| 31/12/X8 | 0.82645 | *0.909/(1+10%)* | 2 479 339 | 225 394 |
| 31/12/X9 | 0.90909 | *1/(1+10%)* | 2 727 273 | 247 934 |
| 31/12/X10 | 1.00000 | *Actual = 1* | 3 000 000 | 272 727 |
| | | | | 1 843 370 |

**W2 Present value table 2: new estimate**

| **Date** | **Discount factor (rounded):10%** | **Calculation of discount factor** | **Liability balance 3 800 000 x Discount factor** | **Finance charges** |
|---|---|---|---|---|
| | 10% | | | |
| 1/1/X1 | 0.385543289 | *0.424/(1+10%)* | 1 465 064 | |
| 31/12/X1 | 0.424097618 | *0.467/(1+10%)* | 1 611 571 | 146 506 |
| 31/12/X2 | 0.46650738 | *0.513/(1+10%)* | 1 772 728 | 161 157 |
| 31/12/X3 | 0.513158118 | *0.565/(1+10%)* | 1 950 001 | 177 273 |
| 31/12/X4 | 0.56447393 | *0.621/(1+10%)* | 2 145 001 | 195 000 |
| 31/12/X5 | 0.620921323 | *0.683/(1+10%)* | 2 359 501 | 214 500 |
| 31/12/X6 | 0.683013455 | *0.751/(1+10%)* | 2 595 451 | 235 950 |
| 31/12/X7 | 0.751314801 | *0.826/(1+10%)* | 2 854 996 | 259 545 |
| 31/12/X8 | 0.826446281 | *0.909/(1+10%)* | 3 140 496 | 285 500 |
| 31/12/X9 | 0.909090909 | *1/(1+10%)* | 3 454 545 | 314 050 |
| 31/12/X10 | 1 | *Actual = 1* | 3 800 000 | 345 455 |
| | | | | 2 334 936 |

## Solution 17.11 continued …

### b) continued …

| W3: change in estimated liability and asset | |
|---|---|
| Revised present value at 31/12/20X3 | 1 950 001 |
| Previous present value at 31/12/20X3 | 1 539 474 |
| Adjustment necessary: debit asset and credit liability | 410 527 |

| W4: change in estimated interest/liability | | Was | Is | Difference |
|---|---|---|---|---|
| Liability balance | 31/12/20X3 | 1 539 474 | 1 950 001 | 410 527 |
| Interest cy | | 153 947 | 195 000 | 41 053 |
| Interest fy (balancing) | | 1 306 579 | 1 654 999 | 348 420 |
| Final balance | 31/12/20X10 | 3 000 000 | 3 800 000 | 800 000 |

| W5: change in estimated depreciation/asset | | Was | Is | Difference | |
|---|---|---|---|---|---|
| Cost - cash | 01/01/20X1 | 2 000 000 | | | |
| PV of future decommissioning costs | | 1 156 630 | | | |
| | | 3 156 630 | | | |
| Depreciation to (3 156 630/ 10 x 3) | 31/12/20X3 | (946 989) | | | |
| Carrying amount | 31/12/20X3 | 2 209 641 | 2 209 641 | | |
| Additional future decommissioning costs | | | 410 527 | | |
| Revised carrying amount | | | 2 620 168 | | |
| RUL | | 7 | 7 | | |
| Depreciation – cy | | (315 663) | (374 310) | 58 647 | Extra depr cy |
| Carrying amount | 31/12/20X4 | 1 893 978 | 2 245 858 | | |
| Future depreciation | | (1 893 978) | (2 245 858) | 351 880 | |
| Future carrying amount | | 0 | 0 | 410 527 | Extra depr fy |

## Solution 17.12

### a) Asset is purchased on 31 December 20X1

**i) Journals: 20X1**

| | Debit | Credit |
|---|---|---|
| Plant: paper mill (A) | 1 694 800 | |
| Bank | | 1 000 000 |
| Decommissioning liability | | 694 800 |
| *Acquisition of asset* | | |

**ii) Impairment loss calculation: seller to pay decommissioning costs**

| | C |
|---|---|
| Expected proceeds on sale of asset (given) | 1 200 000 |
| Costs to sell asset (ignore decommissioning costs: these have already been recognised) | 0 |
| Net selling price of asset and also the recoverable amount (NSP>VIU: R800 000) | 1 200 000 |
| Carrying amount of asset | 1 694 800 |
| Impairment loss | 494 800 |

**iii) Impairment loss calculation: buyer to pay decommissioning costs**

| | C |
|---|---|
| Expected proceeds on sale of asset and liability (1 200 000 – 694 800) | 505 200 |
| Costs to sell asset and liability (ignore decommissioning costs: same reason as above) | 0 |
| Net selling price of asset and liability and also the recoverable amount (NSP>VIU: 800 000 – 694 800 = 105 200) | 505 200 |
| Carrying amount of asset and liability (Asset: 1 694 800 – Liability: 694 800) | 1 000 000 |
| Impairment loss | 494 800 |

### b) Asset is purchased on 1 January 20X1

**i) Journals: 20X1**

| | Debit | Credit |
|---|---|---|
| **1 January 20X1** | | |
| Plant: paper mill (A) | 1 694 800 | |
| Bank | | 1 000 000 |
| Decommissioning liability | | 694 800 |
| *Acquisition of asset* | | |
| **31 December 20X1** | | |
| Depreciation | 49 480 | |
| Accumulated depreciation: paper mill | | 49 480 |
| *Depreciation of asset: (cost:1 694 800 – residual value: 1 200 000)/ 10 years* | | |
| Finance charges | 68 400 | |
| Decommissioning liability | | 68 400 |
| *Liability increase due to unwinding of discount: W1 or financial calculator* | | |
| Impairment loss | 445 320 | |
| Accumulated depreciation and impairment losses | | 445 320 |
| *Impairment loss of asset: part (ii) below* | | |

## Solution 17.12 continued …

**ii) Impairment loss calculation: seller to pay decommissioning costs**

| | C |
|---|---|
| Expected proceeds on sale of asset (given) | 1 200 000 |
| Costs to sell asset (ignore decommissioning costs: these have already been recognised) | 0 |
| Net selling price of asset and also the recoverable amount (NSP>VIU: R800 000) | 1 200 000 |
| Carrying amount of asset (1 694 800 – 49 480) | 1 645 320 |
| Impairment loss | 445 320 |

**iii) Impairment loss calculation: buyer to pay decommissioning costs**

| | C |
|---|---|
| Expected proceeds on sale of asset and liability (1 200 000 – (694 800 + 64 800) ) | 440 400 |
| Costs to sell asset and liability (ignore decommissioning costs: same reason as above) | 0 |
| Net selling price of asset and liability and also the recoverable amount (NSP>VIU: R800 000 – (694 800 + 64 800) = 40 400) | 440 400 |
| Carrying amount of asset and liability (A: (1 694 800 – 49 480) – L: (694 800 + 64 800) | 885 720 |
| Impairment loss | 445 320 |

## Workings

**W1 Present value table:**

| Date | Discount factor (rounded):10% | *Calculation of discount factor* | Liability balance | *Calculation of liability balance (present value)* | Finance charges |
|---|---|---|---|---|---|
| 31 Dec X10 | 1 | *Actual = 1* | 1 800 000 | *1 800 000 x 1* | 163 800 |
| 31 Dec X9 | 0.909 | *1/(1+10%)* | 1 636 200 | *1 800 000 x 0.909* | 149 400 |
| 31 Dec X8 | 0.826 | *0.909/(1+10%)* | 1 486 800 | *1 800 000 x 0.826* | 135 000 |
| 31 Dec X7 | 0.751 | *0.826/(1+10%)* | 1 351 800 | *1 800 000 x 0.751* | 122 400 |
| 31 Dec X6 | 0.683 | *0.751/(1+10%)* | 1 229 400 | *1 800 000 x 0.683* | 111 600 |
| 31 Dec X5 | 0.621 | *0.683/(1+10%)* | 1 117 800 | *1 800 000 x 0.621* | 100 800 |
| 31 Dec X4 | 0.565 | *0.621/(1+10%)* | 1 017 000 | *1 800 000 x 0.565* | 93 600 |
| 31 Dec X3 | 0.513 | *0.565/(1+10%)* | 923 400 | *1 800 000 x 0.513* | 82 800 |
| 31 Dec X2 | 0.467 | *0.513/(1+10%)* | 840 600 | *1 800 000 x 0.467* | 77 400 |
| 31 Dec X1 | 0.424 | *0.467/(1+10%)* | 763 200 | *1 800 000 x 0.424* | 68 400 |
| 1 Jan X1 | 0.386 | *0.424/(1+10%)* | 694 800 | *1 800 000 x 0.386* | |
| Total finance charges | | | | | 1 105 200 |

## Solution 17.13

**a) Medical waste:**

There are two issues to be discussed here: firstly, whether or not a provision should be raised for the cost of the disposal of the medical waste on hand at 31 December 20X6 and secondly, whether to recognise the penalty levied by the Environmental Agency in the 20X6 financial statements.

**Cost of medical waste disposal:**
In terms of IAS 37, Provisions, contingent liabilities and contingent assets, a provision is recognized when the following conditions have been met:

- An entity has a present obligation (legal or constructive) as a result of a past event. In terms of environmental legislation Parklands Hospitals Limited have a legal obligation to dispose of medical waste within two weeks of generation. The generation of the waste is the past event that gives rise to the obligation to dispose of it.
- It is probable that an outflow of resources embodying economic benefits will be required to settle the obligation. As the company's incinerator is not working, Parklands Hospitals Limited will have to pay Waste Incinerators to dispose of the waste for them, which will result in an outflow of resources.
- A reliable estimate can be made of the amount of the obligation. A contract as been entered into with Waste Incinerators to dispose of the waste on hand at C10 000 per ton.

As all three conditions have been met a provision of C120 000 should be recognized at 31 December 20X6 for the 12 tons of medical waste on hand that will be disposed of during January 2007.

**Penalty in respect of medical waste disposal:**

The Environmental Agency levied a penalty on the company on 25 January 2007. This event occurred after the balance sheet date, but before the financial statements were authorized for issue on 15 February 2007. This circumstance meets the definition of an event after reporting date as defined in IAS 10 which defines events after reporting date as those events, favourable and unfavourable, that occur between the balance sheet date and the date when the financial statements are authorized for issue.

The penalty levied on 25 January 2007 provides evidence of conditions that existed at reporting date and qualifies as an adjusting event in terms of IAS 10. The company was in contravention of environmental legislation at 31 December 20X6 and so the condition of a possible penalty existed at balance sheet date. IAS 10 requires adjusting events to be recognized in the financial statements to reflect adjusting events after reporting date. Therefore Parklands Hospitals Limited should adjust the financial statements to recognize a liability of C125 000 at 31 December in respect of the penalty.

## Solution 17.13 continued …

**b) Legal claim:**

The issue to be discussed is whether or not a provision in respect of the legal claim for damages should be recognized in the financial statements of Parklands Hospitals Limited at 31 December 20X6. In terms of IAS 37 a provision is recognized when:

- An entity has a present obligation (legal or constructive) as a result of a past event - As the company's legal advisors have reported that it is highly probable that Mr Downe's claim for damages will be successful against the company, there is a present obligation as a result of his fall at the hospital.
- It is probable that an outflow of resources embodying economic benefits will be required to settle the obligation - An amount will have to be paid in damages as the attorneys have indicated that Mr Downe's claim will probably be successful, which will result in an outflow of resources.
- A reliable estimate can be made of the amount of the obligation - The directors have applied their minds to the amount of damages likely to be awarded and have decided that there is not enough information at the present to make a reasonable estimate. The attorneys will gain a better understanding of the possible amount of damages after the first court proceedings to be held on 1 March 2007. Thus a reliable estimate cannot be made at 31 December 20X6.

When a reliable estimate cannot be made IAS 37 requires the liability to be disclosed as a contingent liability. A contingent liability is defined as a present obligation that arises from past events but is not recognised because:

- It is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation. This requirement does not apply to the claim for damages as some form of damages will be paid.
- Or, the amount of the obligation cannot be measured with sufficient reliability. This requirement is applicable as there is uncertainty as to the amount of damages that will be awarded to Mr Downe at 31 December 20X6.

A contingent liability is not recognized in the financial statements but disclosed in the notes to the financial statements by giving a brief description of its nature, estimate of its financial effect, an indication of the uncertainties relating to the amount or timing of any outflow, and the possibility of reimbursement.

**PARKLANDS HOSPITALS LIMITED**
**EXTRACT NOTES TO THE FINANCIAL STATEMENTS**
**FOR THE YEAR ENDED 31 DECEMBER 20X6**

**7. Contingent liability:**

The company is currently being sued for damages by a visitor who slipped on a wet floor in one of the hospitals. Legal advisors have indicated that it is highly probable that the claimant will be successful, however they are unable to determine the amount of damages likely to be awarded by the court at this point. The case is to be heard in court on 31 March 20X7, when it will be clearer how much can be expected to be paid in damages.

## Solution 17.13 continued …

**PARKLANDS HOSPITALS LIMITED**
**STATEMENT OFCHANGES IN EQUITY**
**FOR THE YEAR ENDED 31 DECEMBER 20X6**

| | Ordinary share capital | Share premium | Retained earnings | Total |
|---|---|---|---|---|
| | C | C | C | C |
| Balance at 1 January 20X5 | 750 000 | 70 000 | 7 658 000 | 8 478 000 |
| Profit for the period | | | 2 858 500 | 2 858 500 |
| | 750 000 | 70 000 | 10 516 500 | 11 336 500 |
| Issue of ordinary share capital | 150 000 | 225 000 | | 375 000 |
| Premium on redemption of preference shares | | (20 000) | 20 000 | - |
| Capitalisation issue of ordinary shares | 300 000 | (275 000) | (25 000) | - |
| Balance at 31 December 20X6 | 1 200 000 | 0 | 10 511 500 | 11 711 500 |